

5/10

#11

ENTERED



OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/900,345A

DATE: 05/22/2002
TIME: 11:27:26

Input Set : A:\10338_5US.txt
Output Set: N:\CRF3\05222002\I900345A.raw

3 <110> APPLICANT: Frazer, Ian Hector
 4 Zhou, Jian
 6 <120> TITLE OF INVENTION: METHOD AND POLYNUCLEOTIDES FOR DETERMINING TRANSLATIONAL
 7 EFFICIENCY OF A CODON
 9 <130> FILE REFERENCE: 10338-5US
 11 <140> CURRENT APPLICATION NUMBER: 09/900,345A
 12 <141> CURRENT FILING DATE: 2001-07-06
 14 <150> PRIOR APPLICATION NUMBER: AU PP8078
 15 <151> PRIOR FILING DATE: 1999-01-08
 17 <150> PRIOR APPLICATION NUMBER: PCT/AU00/00008
 18 <151> PRIOR FILING DATE: 2000-01-07
 20 <160> NUMBER OF SEQ ID NOS: 185
 22 <170> SOFTWARE: PatentIn Ver. 2.0
 24 <210> SEQ ID NO: 1
 25 <211> LENGTH: 732
 26 <212> TYPE: DNA
 27 <213> ORGANISM: Artificial Sequence
 29 <220> FEATURE:
 30 <223> OTHER INFORMATION: Description of Artificial Sequence: Ala(GCA)5GFP
 32 <220> FEATURE:
 33 <221> NAME/KEY: CDS
 34 <222> LOCATION: (1)..(732)
 36 <400> SEQUENCE: 1
 37 atg gca gca gca gca agc aag ggc gag gaa ctg ttc act ggc gtg 48
 38 Met Ala Ala Ala Ala Ser Lys Gly Glu Glu Leu Phe Thr Gly Val
 39 1 5 10 15
 41 gtc cca att ctc gtg gaa ctg gat ggc gat gtg aat ggg cac aaa ttt 96
 42 Val Pro Ile Leu Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe
 43 20 25 30
 45 tct gtc agc gga gag ggt gaa ggt gat gcc aca tac gga aag ctc acc 144
 46 Ser Val Ser Gly Glu Gly Glu Asp Ala Thr Tyr Gly Lys Leu Thr
 47 35 40 45
 49 ctg aaa ttc atc tgc acc act gga aag ctc cct gtg cca tgg cca aca 192
 50 Leu Lys Phe Ile Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr
 51 50 55 60
 53 ctg gtc act acc ttc tct tat ggc gtg cag tgc ttt tcc aga tac cca 240
 54 Leu Val Thr Thr Phe Ser Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro
 55 65 70 75 80
 57 gac cat atg aag cag cat gac ttt ttc aag agc gcc atg ccc gag ggc 288
 58 Asp His Met Lys Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly
 59 85 90 95
 61 tat gtg cag gag aga acc atc ttt ttc aaa gat gac ggg aac tac aag 336
 62 Tyr Val Gln Glu Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/900,345A

DATE: 05/22/2002

TIME: 11:27:26

Input Set : A:\10338_5US.txt

Output Set: N:\CRF3\05222002\I900345A.raw

63	100	105	110	
65	acc cgc gct gaa gtc aag ttc gaa ggt gac acc ctg gtg aat aga atc			384
66	Thr Arg Ala Glu Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile			
67	115	120	125	
69	gag ctg aag ggc att gac ttt aag gag gat gga aac att ctc ggc cac			432
70	Glu Leu Lys Gly Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His			
71	130	135	140	
73	aag ctg gaa tac aac tat aac tcc cac aat gtg tac atc atg gcc gac			480
74	Lys Leu Glu Tyr Asn Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp			
75	145	150	155	160
77	aag caa aag aat ggc atc aag gtc aac ttc aag atc aga cac aac att			528
78	Lys Gln Lys Asn Gly Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile			
79	165	170	175	
81	gag gat gga tcc gtg cag ctg gcc gac cat tat caa cag aac act cca			576
82	Glu Asp Gly Ser Val Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro			
83	180	185	190	
85	atc ggc gac ggc cct gtg ctc ctc cca gac aac cat tac ctg tcc acc			624
86	Ile Gly Asp Gly Pro Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr			
87	195	200	205	
89	cag tct gcc ctg tct aaa gat ccc aac gaa aag aga gac cac atg gtc			672
90	Gln Ser Ala Leu Ser Lys Asp Pro Asn Glu Lys Arg Asp His Met Val			
91	210	215	220	
93	ctg ctg gag ttt gtg acc gct gct ggg atc aca cat ggc atg gac gag			720
94	Leu Leu Glu Phe Val Thr Ala Ala Gly Ile Thr His Gly Met Asp Glu			
95	225	230	235	240
97	ctg tac aag tga			732
98	Leu Tyr Lys			
101	<210> SEQ ID NO: 2			
102	<211> LENGTH: 243			
103	<212> TYPE: PRT			
104	<213> ORGANISM: Artificial Sequence			
106	<220> FEATURE:			
107	<223> OTHER INFORMATION: Description of Artificial Sequence: Ala(GCA)5GFP			
109	<400> SEQUENCE: 2			
110	Met Ala Ala Ala Ala Ala Ser Lys Gly Glu Glu Leu Phe Thr Gly Val			
111	1	5	10	15
113	Val Pro Ile Leu Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe			
114	20	25	30	
116	Ser Val Ser Gly Glu Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr			
117	35	40	45	
119	Leu Lys Phe Ile Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr			
120	50	55	60	
122	Leu Val Thr Thr Phe Ser Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro			
123	65	70	75	80
125	Asp His Met Lys Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly			
126	85	90	95	
128	Tyr Val Gln Glu Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys			
129	100	105	110	
131	Thr Arg Ala Glu Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile			

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/900,345A

DATE: 05/22/2002

TIME: 11:27:26

Input Set : A:\10338_5US.txt

Output Set: N:\CRF3\05222002\I900345A.raw

132	115	120	125
134	Glu Leu Lys Gly Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His		
135	130	135	140
137	Lys Leu Glu Tyr Asn Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp		
138	145	150	155
140	Lys Gln Lys Asn Gly Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile		160
141	165	170	175
143	Glu Asp Gly Ser Val Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro		
144	180	185	190
146	Ile Gly Asp Gly Pro Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr		
147	195	200	205
149	Gln Ser Ala Leu Ser Lys Asp Pro Asn Glu Lys Arg Asp His Met Val		
150	210	215	220
152	Leu Leu Glu Phe Val Thr Ala Ala Gly Ile Thr His Gly Met Asp Glu		
153	225	230	235
			240
155	Leu Tyr Lys		
158	<210> SEQ ID NO: 3		
159	<211> LENGTH: 732		
160	<212> TYPE: DNA		
161	<213> ORGANISM: Artificial Sequence		
163	<220> FEATURE:		
164	<223> OTHER INFORMATION: Description of Artificial Sequence: Ala(GCC)5GFP		
166	<220> FEATURE:		
167	<221> NAME/KEY: CDS		
168	<222> LOCATION: (1)..(732)		
170	<400> SEQUENCE: 3		
171	atg gcc gcc gcc gcc agc aag ggc gag gaa ctg ttc act ggc gtg		48
172	Met Ala Ala Ala Ala Ser Lys Gly Glu Glu Leu Phe Thr Gly Val		
173	1 5 10 15		
175	gtc cca att ctc gtg gaa ctg gat ggc gat gtg aat ggg cac aaa ttt		96
176	Val Pro Ile Leu Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe		
177	20 25 30		
179	tct gtc agc gga gag ggt gaa ggt gat gcc aca tac gga aag ctc acc		144
180	Ser Val Ser Gly Glu Gly Glu Asp Ala Thr Tyr Gly Lys Leu Thr		
181	35 40 45		
183	ctg aaa ttc atc tgc acc act gga aag ctc cct gtg cca tgg cca aca		192
184	Leu Lys Phe Ile Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr		
185	50 55 60		
187	ctg gtc act acc ttc tct tat ggc gtg cag tgc ttt tcc aga tac cca		240
188	Leu Val Thr Thr Phe Ser Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro		
189	65 70 75 80		
191	gac cat atg aag cag cat gac ttt ttc aag agc gcc atg ccc gag ggc		288
192	Asp His Met Lys Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly		
193	85 90 95		
195	tat gtg cag gag aga acc atc ttt ttc aaa gat gac ggg aac tac aag		336
196	Tyr Val Gln Glu Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys		
197	100 105 110		
199	acc cgc gct gaa gtc aag ttc gaa ggt gac acc ctg gtg aat aga atc		384
200	Thr Arg Ala Glu Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile		

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/900, 345A

DATE: 05/22/2002
TIME: 11:27:26

Input Set : A:\10338_5US.txt
Output Set: N:\CRF3\05222002\I900345A.raw

201	115	120	125	
203	gag ctg aag ggc att gac ttt aag gag gat gga aac att ctc ggc cac			432
204	Glu Leu Lys Gly Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His			
205	130	135	140	
207	aag ctg gaa tac aac tat aac tcc cac aat gtg tac atc atg gcc gac			480
208	Lys Leu Glu Tyr Asn Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp			
209	145	150	155	160
211	aag caa aag aat ggc atc aag gtc aac ttc aag atc aga cac aac att			528
212	Lys Gln Lys Asn Gly Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile			
213	165	170	175	
215	gag gat gga tcc gtg cag ctg gcc gac cat tat caa cag aac act cca			576
216	Glu Asp Gly Ser Val Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro			
217	180	185	190	
219	atc ggc gac ggc cct gtg ctc ctc cca gac aac cat tac ctg tcc acc			624
220	Ile Gly Asp Gly Pro Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr			
221	195	200	205	
223	cag tct gcc ctg tct aaa gat ccc aac gaa aag aga gac cac atg gtc			672
224	Gln Ser Ala Leu Ser Lys Asp Pro Asn Glu Lys Arg Asp His Met Val			
225	210	215	220	
227	ctg ctg gag ttt gtg acc gct gct ggg atc aca cat ggc atg gac gag			720
228	Leu Leu Glu Phe Val Thr Ala Ala Gly Ile Thr His Gly Met Asp Glu			
229	225	230	235	240
231	ctg tac aag tga			732
232	Leu Tyr Lys			
235	<210> SEQ ID NO: 4			
236	<211> LENGTH: 243			
237	<212> TYPE: PRT			
238	<213> ORGANISM: Artificial Sequence			
240	<220> FEATURE:			
241	<223> OTHER INFORMATION: Description of Artificial Sequence: Ala(GCC)5GFP			
243	<400> SEQUENCE: 4			
244	Met Ala Ala Ala Ala Ser Lys Gly Glu Glu Leu Phe Thr Gly Val			
245	1	5	10	15
247	Val Pro Ile Leu Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe			
248	20	25	30	
250	Ser Val Ser Gly Glu Gly Glu Asp Ala Thr Tyr Gly Lys Leu Thr			
251	35	40	45	
253	Leu Lys Phe Ile Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr			
254	50	55	60	
256	Leu Val Thr Thr Phe Ser Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro			
257	65	70	75	80
259	Asp His Met Lys Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly			
260	85	90	95	
262	Tyr Val Gln Glu Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys			
263	100	105	110	
265	Thr Arg Ala Glu Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile			
266	115	120	125	
268	Glu Leu Lys Gly Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His			
269	130	135	140	

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/900,345A

DATE: 05/22/2002
TIME: 11:27:26

Input Set : A:\10338_5US.txt
Output Set: N:\CRF3\05222002\I900345A.raw

271 Lys Leu Glu Tyr Asn Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp
272 145 150 155 160
274 Lys Gln Lys Asn Gly Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile
275 165 170 175
277 Glu Asp Gly Ser Val Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro
278 180 185 190
280 Ile Gly Asp Gly Pro Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr
281 195 200 205
283 Gln Ser Ala Leu Ser Lys Asp Pro Asn Glu Lys Arg Asp His Met Val
284 210 215 220
286 Leu Leu Glu Phe Val Thr Ala Ala Gly Ile Thr His Gly Met Asp Glu
287 225 230 235 240
289 Leu Tyr Lys
292 <210> SEQ ID NO: 5
293 <211> LENGTH: 732
294 <212> TYPE: DNA
295 <213> ORGANISM: Artificial Sequence
297 <220> FEATURE:
298 <223> OTHER INFORMATION: Description of Artificial Sequence: Ala(GCG)5GFP
300 <220> FEATURE:
301 <221> NAME/KEY: CDS
302 <222> LOCATION: (1)..(732)
304 <400> SEQUENCE: 5
305 atg gcg gcg gcg gcg gcg agc aag ggc gag gaa ctg ttc act ggc gtg 48
306 Met Ala Ala Ala Ala Ser Lys Gly Glu Glu Leu Phe Thr Gly Val
307 1 5 10 15
309 gtc cca att ctc gtg gaa ctg gat ggc gat gtg aat ggg cac aaa ttt 96
310 Val Pro Ile Leu Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe
311 20 25 30
313 tct gtc agc gga gag ggt gaa ggt gat gcc aca tac gga aag ctc acc 144
314 Ser Val Ser Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr
315 35 40 45
317 ctg aaa ttc atc tgc acc act gga aag ctc cct gtg cca tgg cca aca 192
318 Leu Lys Phe Ile Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr
319 50 55 60
321 ctg gtc act acc ttc tct tat ggc gtg cag tgc ttt tcc aga tac cca 240
322 Leu Val Thr Thr Phe Ser Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro
323 65 70 75 80
325 gac cat atg aag cag cat gac ttt ttc aag agc gcc atg ccc gag ggc 288
326 Asp His Met Lys Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly
327 85 90 95
329 tat gtg cag gag aga acc atc ttt ttc aaa gat gac ggg aac tac aag 336
330 Tyr Val Gln Glu Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys
331 100 105 110
333 acc cgc gct gaa gtc aag ttc gaa ggt gac acc ctg gtg aat aga atc 384
334 Thr Arg Ala Glu Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile
335 115 120 125
337 gag ctg aag ggc att gac ttt aag gag gat gga aac att ctc ggc cac 432
338 Glu Leu Lys Gly Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 05/22/2002
PATENT APPLICATION: US/09/900,345A TIME: 11:27:27

Input Set : A:\10338_5US.txt
Output Set: N:\CRF3\05222002\I900345A.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:2; Line(s) 107

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/900,345A

DATE: 05/22/2002

TIME: 11:27:27

Input Set : A:\10338_5US.txt

Output Set: N:\CRF3\05222002\I900345A.raw